

Claims: WHAT IS CLAIMED IS:

1. A method for storing and informing at least one property of a wireless communication device (MS1—MS4) to a mobile communication network (PLMN), characterized in that parameter data representing said at least one property of said wireless communication device (MS1—MS4) is stored in said wireless communication device (MS1—MS4), and transmitted from said wireless communication device (MS1—MS4) to the mobile communication network (PLMN).
2. The method according to claim 1, characterized in that said parameter data is transmitted from said wireless communication device (MS1—MS4) to the communication network in connection with registration of said wireless communication device (MS1—MS4) to the mobile communication network (PLMN).
3. The method according to claim 1 or 2, characterized in that said parameter data is transmitted from said wireless communication device (MS1—MS4) to the communication network prior to a call being set-up with said wireless communication device (MS1—MS4).
4. The method according to claim 3, characterised in that the parameter data is checked to determine if it is appropriate for the type of call during call set-up with said wireless communication device (MS1—MS4), wherein a call is not established if the parameter data is not appropriate for the type of call.
5. The method according to claim 1, 2, 3 or 4, characterized in that said parameter data is transmitted from said wireless communication device (MS1—MS4) to the communication network in connection with a handover.
6. The method according to ^{claim 1} ~~any of the claims 1 to 5~~, characterised in that the parameter data is transmitted to a mobile services switching centre (MSC1) of the mobile communication network (PLMN), or a serving GPRS support node (SGSN).

7. The method according to ^{claim 1} ~~any of the claims 1 to 6~~, in which method an International Mobile Station Equipment Identity (IMEI) is defined for said wireless communication device (MS1—MS4), characterised in that the parameter data is stored in the International Mobile Station Equipment Identity (IMEI).

8. The method according to claim 7, characterised in that the International Mobile Station Equipment Identity (IMEI) comprises at least one field for storing the parameter data, and that the length of said field is fixed.

9. The method according to claim 7, characterised in that the International Mobile Station Equipment Identity (IMEI) comprises at least one field for storing the parameter data, and that the length of said field is variable.

10. The method according to claim 7, ~~8 or 9~~, characterised in that the International Mobile Station Equipment Identity (IMEI) is divided to a non-modifiable part and a modifiable part, and that at least part of the parameter data is stored in said modifiable part.

11. The method according to ^{claim 7} ~~any of the claims 7 to 10~~, characterised in that the International Mobile Station Equipment Identity (IMEI) is stored in connection with manufacturing of the wireless communication device (MS1—MS4).

12. The method according to ^{claim 7} ~~any of the claims 7 to 11~~, characterised in that the International Mobile Station Equipment Identity (IMEI) is updated in connection with changes of the properties of the wireless communication device (MS1—MS4).

13. The method according to ^{claim 1} ~~any of the claims 1 to 12~~, characterised in that the parameter data transmitted from said wireless communication device (MS1—MS4) is stored at least in the mobile services switching centre (MSC1) of the mobile communication network (PLMN).

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14. The method according to ^{claim 1} ~~any of the claims 1 to 13~~, characterised in that the parameter data is stored temporarily in the mobile communication network (PLMN).

5 15. The method according to ^{claim 1} ~~any of the claims 1 to 14~~, characterised in that the wireless communication device (MS1—MS4, S3) is a mobile phone.

16. The method according to ^{claim 1} ~~any of the claims 1 to 14~~, characterised in that the wireless communication device (MS1—MS4) is a Communicator.

10 17. The method according to ^{claim 1} ~~any of the claims 1 to 14~~, characterised in that the wireless communication device (MS1—MS4) is a radio card.

18. The method according to ^{claim 1} ~~any of the claims 1 to 17~~, characterised in that the parameter data contains information about the hardware properties of the wireless communication device (MS1—MS4).

15 19. The method according to ^{claim 1} ~~any of the claims 1 to 18~~, characterised in that the parameter data contains information about the software properties of the wireless communication device (MS1—MS4).

20 20. The method according to ^{claim 1} ~~any of the claims 1 to 19~~, characterised in that the parameter data contains information about the preferences of the user of the wireless communication device (MS1—MS4).

21. The method according to ^{claim 1} ~~any of the claims 1 to 20~~, characterised in that modification of the parameter data by the user of the wireless communication device (MS1—MS4) is prevented.

25 22. The method according to ^{claim 1} ~~any of the claims 1 to 21~~, further comprising steps for establishing a call for transmitting information from a first communication device (MS1—MS4) to a second communication device (MS1—MS4, S1, S2), characterised in that said second communication device is a wireless communication device (MS1—MS4), and that the information is optimised for use by the second communication device, by using the parameter data.

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23. The method according to ^{claim 1} ~~any of the claims 1 to 22~~, further comprising steps for performing communication between the communication network (PLMN) and another communication device (MS1—MS4, S1, S2), characterized in that the parameter data is transmitted to another communication device (MS1—MS4, S1, S2).

24. The method according to ^{claim 1} ~~any of the claims 1 to 23~~, further comprising steps for performing communication between the communication network (PLMN) and another communication network (PSTN, PDN), characterized in that the parameter data is transmitted to another communication network (PSTN, PDN).

25. The method according to ^{claim 1} ~~any of the claims 1 to 24~~, where information is transmitted from a first communication device (MS1) to a second communication device (MS2), characterized in that said second communication device is a wireless communication device (MS1—MS4), and that information to be transmitted is converted into a format suitable for the second wireless communication device (MS2) in the first communication device (MS1).

26. The method according to ^{claim 1} ~~any of the claims 1 to 24~~, where information is transmitted from a first communication device (MS1) to a second communication device (MS2), characterized in that said second communication device is a wireless communication device (MS1—MS4), and that information to be transmitted is converted into a format suitable for the second wireless communication device (MS2) in the communication network (PLMN).

27. A wireless communication device (MS1—MS4) comprising means (5, 12) for informing at least one property of said wireless communication device (MS1—MS4) to a mobile communication network (PLMN), characterised in that the wireless communication device (MS1—MS4) further comprises:

— means (5, 9) for storing parameter data representing said at least one property of the wireless communication device (MS1—MS4), and

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41. A wireless communication system comprising at least a mobile communication network (PLMN), a wireless communication device (MS1—MS4), and means (5, 12) for informing at least one property of

said wireless communication device (MS1—MS4) to said mobile communication network (PLMN), **characterised** in that the system comprises further:

— means (5, 9) for storing parameter data representing said at least one property of the wireless communication device (MS1—MS4) in the wireless communication device (MS1—MS4), and

— means (5, 12) for transmitting the parameter data from the wireless communication device (MS1—MS4) to said mobile communication network (PLMN).

42. The wireless communication system according to claim 41, **characterized** in that it comprises means (ANT, 12) for transmitting said parameter data from said wireless communication device (MS1—MS4) to the communication network (PLMN) in connection with registration of said wireless communication device (MS1—MS4) to the mobile communication network (PLMN).

43. The wireless communication system according to claim 41 ~~or 42~~, **characterized** in that it comprises means (ANT, 12) for transmitting said parameter data from said wireless communication device (MS1—MS4) to the communication network (PLMN) prior to a call being set-up with said communication network (PLMN).

44. The wireless communication system according to claim 43, **characterized** in that it comprises means (5) for checking the parameter data to determine if it is appropriate for the type of call during call set-up with said wireless communication device (MS1—MS4), wherein a call is not established if the type of the parameter data is not appropriate for the type of call.

45. The wireless communication system according to ^{claim 41} ~~any of claims 41 to 44~~, **characterized** in that it comprises means (ANT, 12) for transmitting said parameter data from said wireless communication device (MS1—MS4) to the communication network (PLMN) in connection with a handover.

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46. The wireless communication system according to ^{claim 41} ~~any of claims 41 to 45~~, characterized in that said means (5, 9) for storing the parameter data comprises an International Mobile Station Equipment Identity (IMEI).

5 47. The wireless communication system according to ^{claim 41} ~~any of claims 41 to 46~~, characterized in that the mobile communication network (PLMN) comprises means (MSC1) for storing the parameter data received from said wireless communication device (MS1—MS4).

10 48. The wireless communication system according to claim 47, comprising a mobile services switching centre (MSC1), characterized in that the parameter data is stored in said mobile services switching centre (MSC1).

15 49. The wireless communication system according to claim 47 ~~or 48~~, comprising a register (GR), characterized in that the parameter data is stored in said register (GR).

20 50. The wireless communication system according to claim 47, further comprising means for communication between the communication network (PLMN) and another communication device (MS1—MS4, S1, S2), characterized in that the mobile communication network (PLMN) comprises means (MSC1) for transmitting the parameter data to another communication device (MS1—MS4, S1, S2).

25 51. The wireless communication system according to ^{claim 47} ~~any of claims 47 to 50~~, further comprising means for communication between the communication network (PLMN) and another communication network (PSTN, PDN), characterized in that the mobile communication network (PLMN) comprises means (MSC1) for transmitting the parameter data to another communication network (PSTN, PDN).

30 52. The wireless communication system according to ^{claim 41} ~~any of claims 41 to 50~~, further comprising means for establishing a call for communication between the wireless communication device (MS1—MS4) and another communication device (MS1—MS4, S1, S2),

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characterized in that the communication is optimised by using the parameter data.

53. The wireless communication system according to ^{claim 41} ~~any of claims 41-52~~, further comprising means for establishing a call for transmitting and receiving information between the wireless communication device (MS1—MS4) and another communication device (MS1—MS4, S1, S2), characterized in that the information is optimised for use by the receiving communication device, by using the parameter data.

54. The wireless communication system according to ^{claim 41} ~~any of claims 41-53~~ comprising means for transmitting information from a first wireless communication device (MS1—MS4) to a second wireless communication device (MS1—MS4), characterized in that the first wireless communication device (MS1) comprises means for converting the information to be transmitted into a format suitable for the second wireless communication device (MS1—MS4).

55. The wireless communication system according to ^{claim 41} ~~any of claims 41-54~~ comprising means for transmitting information from a first wireless communication device (MS1—MS4) to a second wireless communication device (MS1—MS4), characterized in that the communication network (PLMN) comprises means for converting the information to be transmitted into a format suitable for the second wireless communication device (MS1—MS4).

56. A mobile services switching centre (MSC1) of a mobile communication network (PLMN) having a wireless communication device (MS1—MS4), and means (5, 12) for informing at least one property of said wireless communication device (MS1—MS4) to said mobile communication network (PLMN), characterised in that the mobile services switching centre (MSC1) comprises further means (5, 9) for storing parameter data representing said at least one property of the wireless communication device (MS1—MS4).

57. A support node (SGSN) of a mobile communication network (PLMN) having a wireless communication device (MS1—MS4), and means (5, 12) for informing at least one property of said wireless

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communication device (MS1—MS4) to said mobile communication network (PLMN), characterised in that the support node (SGSN) comprises further means (5, 9) for storing parameter data representing said at least one property of the wireless communication device (MS1—
5 MS4).

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